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COLMAN'S RURAL WORLD

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COLMAN'S RURAL WORLD.

H. COLMAN, EDITOR.
Published every Wednesday, in Chemical building, corner of Eighth and Olive streets, St. Louis, Mo., at one dollar per year. Eastern office, Chalmers D. Colman, 530 Temple Court, New York City. Advertisers will find the RURAL WORLD the best advertising medium of its class in the United States. Address all letters to COLMAN'S RURAL WORLD, Chemical Building, St. Louis, Mo.

Subscribers should bear in mind that the RURAL WORLD is stopped when the time paid for has expired. To keep up a constantly increasing subscription list we allow old subscribers to send a NEW name with their own for one dollar, and to add at any time NEW names at fifty cents each—but renewals without new names are at one dollar a year. We also allow subscribers to club with the twice-a-week "Republic" or the twice-a-week "Globe-Democrat" at \$1.50 a year—thus securing two one-dollar papers at this very low price. We appreciate the kind efforts of our patrons in all parts of the union in speaking good words in behalf of the RURAL WORLD, and it is to these efforts we attribute our constantly increasing circulation.

INFLUENCE OF PALATABILITY IN FEEDING.

The influence of the palatability of rations in feeding stock is a matter of great importance. It is a subject that has been ignored by the scientific man in their investigations and neglected by practical feeders, particularly those who handle large herds or who follow the "balanced ration" plan. This is largely due to the fact that the experimenter has had his eye on the item of digestibility and has devoted his attention largely to chemical analysis.

This is entirely proper, as the determination of the chemical values of feed is a great task, requiring years of patient study and experiment. Now that we have a fairly firm basis on which to stand as to the relative value of the various feeds employed by the stock man, the knights of the test tube would do well to take up seriously the question of the influence of the individual taste of the animal upon digestibility.

A noted man in one of the famous eastern colleges has gravely stated that corn fodder is as nutritious as corn ensilage. Chemistry is an exact science and the professor has proved his statement to his own satisfaction. The chemical test for digestible nutrients shows it. What more do you want? Just one trifling item, and that is the personal opinion of Mrs. Cow. Experience shows us that her view is something like that of the soldier boys upon whom Uncle Sam has been experimenting for several years, endeavoring to find an "emergency ration." That is, one highly nutritious and condensed, which may be carried by the soldier on the march and render him independent of foraging.

Several attempts at food tablets and condensed lozenges, have been made but so far with indifferent success. Chemistry shows that the tablets contain as much nutriment as an ordinary meal and when the sergeant pops a pellet into the robin-like mouth of a hungry soldier and says, "There! You've had your dinner," the would seem that an ideal had been realized. It is quite unreasonable for our boys in blue to decline in health and strength when placed on such diet. It is evident that there is something more needed than mere "digestible content" in human food and that the element of taste and experiment proves that the physiological factor is also present in the case of the lower animals, although in a less degree.

There is a gustatory element necessary to health. The individual must enjoy his food and this item of palatability has direct influence upon digestion. Experiments have been made recently upon dogs showing that the gastric secretions of the stomach are more prompt and copious where the animal is fed something he likes.

A fattening steer, a thoroughbred horse, and a milk cow are all animals of sensitive nervous organism. They will reflect very quickly, kindness or harsh treatment, regularity or spasmodic feeding and we know in a general way that they thrive better when given food that pleases their palates.

There is no reason why this subject should not receive scientific consideration. We should know particularly, by extensive tests and experiments, just what foods are most preferred by the different species of domesticated animals. Physiologists should be able to determine, by careful observation and study, the true influence upon the element of individual taste and tell us exactly how it operates. We already know by the testimony of Mrs. Cow that she prefers ensilage to corn stover and even to green corn fodder and she registers her disposition under oath at the milk pail.

It may be seen when this question is explored, that a healthy hog-cholera proof-feed may be produced by giving him feed he most enjoys, instead of making a sewer of him.

The fact that Prof. Henry, who has written the greatest book yet on "Feeds and Feeding" does not devote any space to "palatability" in all his 667 pages, shows that this matter has been neglected.

WINTER OATS.

It is somewhat of a surprise that farmers and seedmen have given so little attention to fall sown oats. The advantages in growing this cereal over the spring sown variety are so numerous that it makes a very attractive proposition to the business farmer and an interesting problem to the experimenter. Before attempting an enumeration of the good points of winter oats it is well to state that in the northern states they have not succeeded owing to the severe winters. In Kentucky and corresponding latitudes "winter turf oats," as it is called, is a decided success. In the state of Missouri the testimony is varied, one farmer in Boone county making a specialty of raising acclimated seed that withstand the winters up to the fortieth parallel, while others have experienced difficulty in this direction.

A plant transferred from one climate to another seldom thrives until time enables it to accustom itself to the change and this fact should always be borne in mind by seed buyers. If possible, procure seed from the vicinity or that is known to adapt itself to your environment.

With winter oats it is but a matter of gradual changing from a tender to a hard plant and this is done by the well-known process of selection and breeding. It remains practically the same variety in all its characteristics, except the ability to live through the winter.

Every farmer knows that oats require a large amount of moisture. A dry spring is fatal to the crop. Spring oats may be sown early—as early as possible. The condition of the soil, even when the land is fall plowed, will often prevent early sowing and the season of year is a rushing one and many demands are made on the farmer's time.

With hardy winter oats, the plowing is done in the fall when the ground is in prime tith, and the seed is put in at a time when work is not pushing. They may be sown any time from Sept. 15th to Oct. 15th in this latitude and this wide margin of seeding time is a distinct advantage. The oats get a good start and do their growing in the early spring when rains are reasonably assured; they mature earlier and thus escape the first heat of summer and the land is left free for a crop of cow peas, which can be followed by oats again in the fall. If the cow peas are harvested the oats may be drilled on the cow-pea stubble without an extra plowing. If the ground is hard, a disking is advisable.

The writer has sown winter oats this year, sown Oct. 15th, and so far it looks very promising. The outcome is somewhat problematical as the only available seed was from Kentucky. Progress will be reported as to its wintering. We have since learned that the Experiment Station at Columbia has demonstrated the adaptability of winter oats in this state and that Missouri seed is procurable through Station advices.

PURE FOOD LAW.

The lower house of Congress passed on Oct. 19th, a bill of great importance to the country and of great importance to the agricultural community. It is known as the Pure Food bill. It is intended to protect consumers from adulterations and substitution. The sale, importation and exportation of drugs or foods which are adulterated or misbranded is forbidden. The bill defines "adulterations" in specific terms and provides that any article of food or drug that is adulterated or misbranded and is imported from a foreign country or transported from one state to another, shall be liable to confiscation by a process of libel or condemnation in the United States courts.

No more vital piece of legislation has come before the law-making body for years than this one regulating the purity of articles sold for bodily consumption. The selfish struggle for wealth has led to the manufacture of enormous quantities of food stuffs that are not what they seem. Imitations of butter, honey, milk, sirup, flour and many other items have been put on the market and sold to an unsuspecting public. The adulteration of such articles is practiced to an alarming extent and the quantity of embalm food sold in the United States is appalling.

The most common form of preserving perishable goods is by the admixture of some amount of borax or some form of this antiseptic. The borax dealers claim that it is not injurious but their testimony is not conclusive. The opinion of the manufacturers who use preservatives, is also open to the same objection of self-interest.

The Bureau of Chemistry in the National Department of Agriculture is conducting an experiment on twelve young men with a view of adding to the history of this vexed question of food adulteration and in the course of a few months we can give to our readers the results of this test.

It is significant that the amendment offered by the meat packers protesting against the prohibition of the use of borax acid was lost by a vote of 50 to 16. The protest is an admission of its general use and the vote is a warning that its further indulgence will not be tolerated. The various forms of borax and kindred drugs used in the preservation of food-

THE CHRISTMAS TREE.

The Christmas tree dates back to the middle ages. It is still a great institution in Germany and England and in the large American cities the celebration of Christmas without the tree would be considered a barren observance. It has been stated that the origin of the Christmas tree finds its birth in Druidical rites which were decidedly heathen. However, the observance of this feature of the Christmas celebration is as wide as the Christian religion and forms a beautiful and impressive part of the home life of Christian families. So much for its history.

A Christmas tree is a thing of beauty and a joy while it lasts. We look at its delicate, feathery fronds of evergreen, and to deck it out in tawdry tinsel seems like painting the lily or adorning the rose. This is its aesthetic side. The little ones think Christmas would not be quite Christmas without the Christmas tree. It would be like leaving Santa Claus out or like leaving Hamlet out of Hamlet. What prettier picture of home-life than the glittering, gift-hung tree on Christmas eve, sparkling with its tiny candle-lights, when the impatient children are ushered breathlessly into its presence and stand around in big-eyed, awe-struck silence or rush shouting upon the dangling treasures, they know to be theirs. The very guardian angel of the home hovers about such a scene like a spirit. It is the Christmas spirit and this is the sentimental aspect.

How many of us think about the business side of the Christmas tree industry. Away out on the bleak hillside the "man with the ax" has been cutting and piling the youngsters of the pine, larch, spruce and hemlock families for weeks and hauling them away to the station whence they are shipped to the cities where the boys and girls grow up to be men and women without ever seeing a pine tree growing in its native soil. These young trees sell for 25c to 50c and are handled by commission men and the local retail butcher and grocer with no thought beyond the per cent of profit realized on their sale.

There is still another view to take of the Christmas tree habit and it is rather a sad one. Hundreds of thousands of these young evergreen trees are sacrificed every year and the hills are being denuded of their natural forest growth by this slaughter of the innocents. Where each tree is cut and carried away, a stately monarch should some day rear its head. We need these mature trees for many purposes and when they are removed by the judicious process of selection adopted by the National Bureau of Forestry it is the fitting ending of a useful life. But the bare hills left by the gathering of young trees wash and wear away. The rainfall rushes down the steep slopes and becomes a flood such as we see in the Brazos region in Texas—the treeless. Forests are Nature's reservoirs and help to conserve the moisture of the wet season for use during the ensuing drouthy time.

When a forest growth is ruthlessly cut or burned away with no sense of discrimination or judgment, it is like opening the flood gates of a great storage basin and fatal extremes follow—first too much water, then too dry. This is the economic side of the subject. What shall we do with it? Continue the waste for a tradition? Or be satisfied to hang our stockings in the chimney corner and let the young trees grow to maturity?

A NEW RANGE LAW PROPOSED.

We are hopeful that some compromise between the homesteader and the cattle baron may be made and a permanent truce declared between the two conflicting elements for their mutual good.

The Nebraska cattlemen have prepared a grazing bill which, it is understood, will not be objectionable to the interior department and which, if enacted into law, will form the basis for the amicable settlement of the controversy that has been going on for several years over the control of the public ranges. Mr. Hitchcock, secretary of the interior, now has the bill under consideration and will report his conclusions to Congress immediately after the Christmas recess. "I have not gone over the bill in detail," said Mr. Hitchcock this afternoon, "but so far as I understand its provisions, it meets the wishes of the department. The bill proposes to place the leasing of public lands and the management of herds upon a business basis, and I am gratified at this turn of affairs. The prospect is very good for a settlement of the controversy."

The proposed bill limits the size of the herds that may be placed upon any one tract of land to 60 head of cattle and allows a maximum of thirty acres to each head of cattle. This would make a total of about 20,000 acres as the maximum area that may be included in any one tract. The homesteader is also given prior rights in the selection of lands and may file upon the leased lands, under rules and regulations approved by the secretary of the interior. It is also proposed to give the secretary power to fix the rental price of the grazing lands, ac-

ording to the value of the property for grazing purposes. The rental can not be less than 1 cent per acre per annum nor more than 6 cents. The bill offered by the cattlemen last session fixed the rental at 1 cent per acre per annum. The measure practically leaves the entire disposition of the leases to the secretary of the interior.

NOTES FROM AN OHIO FARM.

Editor RURAL WORLD: Three more days to Christmas and the Farm Notes man has been sick just a week. He has had a kidney trouble since he was 14 years old and about once a year it gets him down for a few days. I wish that some reader would tell me of a cure. My kidneys "go on a strike" occasionally and it takes several days to get them started up again. The doctors do not seem to be able to do me any good and all the remedy that has seemed to help for ten years has failed me this time. We have just had one day with the mercury as low as 14 degrees above zero and many fields of wheat and rye would hide a rabbit. Some of my rye would hide a rabbit. The Ohio river took a rise Dec. 16 and caught several thousands of bushels of corn in the shock. As the wind was high all of this was carried out into the stream and lost.

The first three columns of the RURAL WORLD for Dec. 17th ought to be left standing for three months, or until every reader has learned them by heart. Bro. Lawson and I will not agree with "the trained mind of the college professor," but we will agree that the "monologues" and "theatricals" don't attend the farmers' institutes.

The fact that farmers will travel 10 or 15 miles of muddy roads to hear professional men and college instructors talk on farming, is doing a great deal to break down the barrier between ignorance and science. The man who listens to Dean Waters' talk on Cattle Feeding and who talks with that genial gentleman upon the details of making a bunch of premium steers, must at once see that he is master of his subject. The teacher must know more than the pupil, and the trained mind of the college professor, combined with a practical knowledge of every detail of the subject upon which he treats must be of practical use to his hearers.

Plain John Jones, farmer, may have made a fortune feeding cattle and at the same time John Jones, poultry man, may not have made a fortune. The difference between the feeding value of corn and oil meal. He knows that he bought 500 steers in Chicago in October and paid \$1,500 for them, and he knows that he sold them in April for \$2,000, but he does not know how many bushels of corn or how many tons of timothy hay (very dry) he sold them for. He also knows that he sold his timothy hay for more than his profit on the steers. He knows that he has \$500 more cash on April 10 than he had on Oct. 10, but for the life of him he could not tell you how much of that \$500 is net profit.

The ten steers that Dean Waters put on full feed Oct. 10 had every pound of feed weighed out to them and even the waste feed was weighed and charged against them. Every pound they consumed was charged at market price and on April 10 when they were sold he knew to a cent whether the \$100 more than the cost paid for them was his profit or the contrary. Then when Mr. Waters goes out among the farmers he is able to tell them whether it paid to feed those steers or whether it would have been best to sell the feed they consumed.

In 1886 two brothers from Delaware bought lands on a creek two miles west of where I live. "Uncle Henry" was a miller, and "Uncle Jimmy" farmed, and a fashion. One year Uncle Jimmy had a lot of soft corn and a big stack of timothy hay that he could have sold for \$30. Instead of giving the corn away and selling the hay he bought a steer for \$30 and during the winter fed out the hay and corn. The steer was nice and fat in April and Uncle Jimmy sold him for \$30. The miller joked him about his experience and wanted to know where the profit came in. "Why, Henry," said he, "I could not sell the corn and I represented profit or the contrary. Then when Mr. Waters goes out among the farmers he is able to tell them whether it paid to feed those steers or whether it would have been best to sell the feed they consumed."

That answer of Prof. Mumford to Question No. 5 was good. "The great mass of farmers do not yet appreciate the fact that the various operations of the farm are taught at the agricultural colleges," and they are taught so that they may be put into practice on any farm in the U. S. This is not saying that everything taught in Missouri can be practiced in California, or everything taught in Florida, but correct principles are taught and these principles are general in their application.

I was not well enough to attend the Poultry Show at our county seat, but I have reports from it and will make it the subject of a talk at one of our institutes. There were many sad disappointments when the expert judge announced the scores. This was due to the fact that many of the exhibitors are breeding without any definite knowledge of the points

of the breeds they are keeping. To most of them a Barred Rock is any kind of "domestic" bird, or a white Wyandotte any kind of a good sized white chicken despite the fact that the "white" is decidedly "creamy." I know that it would not pay each of 70 members of that club to spend \$50 in taking a year at an agricultural college with a view of making a study of poultry alone, but it would pay them well to subscribe \$5 each toward the expense of sending some bright young man or young woman to college with the understanding that they be paid back by his or her services in selecting their breeding pens and show birds. It is the trained eye that counts such matters and not your opinion or my opinion; biased by self interest, that we have the best fowls in the whole neighborhood, that is regarded by the expert judge.

A few weeks ago I was looking at some hogs, the property of a young breeder who has started out "to show" men of experience how to do it. Now I am not a hog man and am about as strongly prejudiced against hogs as John Randolph was against sheep, but six or eight weeks a year spent with scientific breeders has taught me a few things. Every word of this young man's "registered thoroughbred" sow in a \$35 per with a mud bottom. She was due to farrow in three weeks and was eating corn from under three inches of water in a box trough, the object of the water being to keep the blanket-dashed hogs from getting the feed.

I suggested that perhaps a feed or two of bran would do the sow good, and was informed that she was getting a teaspoonful of Dr. Cheater's patent hog food once a day, and that she would probably have 10 pigs worth \$5 each. I have since learned that she had one-tenth of ten pigs and it died. Every word of this young man's "truth, friends, and I very much doubt whether John Jamison, Theo Lewis, Dr. Bittling and Judge Frost could have taught that young man anything."

In the past 12 years of institute work I have visited many of the best known breeders of fine stock, and in every case I have found the most successful men to be the men who bought and read one book and papers bearing upon this profession, and whenever I found a man who inclined to sneer at books, at farm papers, and at the Agricultural College or Experiment Station and its work, I found that that man's herds and flocks lacking in something.

Eight years ago a man took a noted expert judge and myself six miles to show us his herd and he put in all the time on the road in making fun of farm books and papers. His object was to get the recommendation of a herd of scrub hogs and he failed to do it. He also failed in business as a breeder after he had squandered a fortune and now earns a living as clerk of a second class hotel.

Ten miles from him lived a young man who worked his way through a farm school and veterinary college. This man is now the manager of a large estate with the privilege of practicing his profession; a privilege worth perhaps \$3,000 a year.

I learned this morning that the young man who took most of the premiums at the poultry show has about every book on poultry that he could hear of or find, at least five chicken papers. He sold four cockerels at \$5 to \$10 each and refused \$5 for one premium bird. One man had every entry disqualified and he says the judge "did not know a good bird from a bad one."

C. D. LYON.
Higginsport, Ohio, Dec. 22, 1902.

POSTAL CHANGES.

Editor RURAL WORLD: We are going to keep an eye on Congress this winter to see what is done with that Postal Currency bill as well as the recommendation of the third assistant postmaster general with regard to the reduction of postage on merchandise. While we cannot yet hope for penny postage on letters, we may very consistently ask our legislators to favor us with a cheap postal package rate. Many a pleasant reminder of home ties and friendly good-wishes would find their way to absent loved ones were it not for the prohibitive tariff collected by Uncle Sam or his allies, the express companies.

When the rural free delivery mail system, contemplated by the Post Office Department, shall have been established, we will have as complete a delivery system as can well be devised for all concerned, and to use it for the benefit of the farmers, who pay the bills, would be but justice to say the least. True, this would come in direct competition with the express companies, many of whom are not rich; to study hard, think quietly, talk gently, act frankly, to listen to stars and birds, to babes and sages, with open heart; to bear all cheerfully, do all bravely, await occasions, hurry never—in a word, to let the spirit of unkindness and unconquered grow up through the common. This is to be my symphony.

Wm. Ellery Channing.
The prospect that the Venezuelan trouble will be settled by arbitration is hopeful. The United States government will be asked to act as arbitrator and before many weeks have elapsed the incident will be closed. Our suggestion to European governments is to demand cash in advance from all the little South American republics. Venezuela's credit has been strained to the breaking point.

F. E. Brown, Moscow, Ky., is very anxious to learn who Mr. A. Dodge's Short Method of Arithmetic is published.

as well as the freight or express charges to the railroad. The profits alone remaining in the hands of the home merchant, whose family in turn spend it on the opera, the concert, the lecture or fine clothes, whereby it finds its way to the larger cities about as quickly as if the farmer had sent it direct.

No amount of argument will convince me that I do the right thing by myself and family when I take the team and drive from five to twenty miles, losing a day's work and paying one dollar for an article when for a two cent stamp and ten minutes' time I can have the same article delivered at my door at from 50c to 85c. That 15c to 50c feels just as good in my pocket as it would in the home merchant's; and will do the country just as much good.

The mail order houses have brought their knitting and have come to stay, and the sooner the merchants of the small towns and country see it and arrange their prices accordingly the better it will be for them.

Some of them may have to curtail their expenses and a few of them may have to go out of business. But there is room for all of them on the farm, and as a large majority of them were born farmers, it will work no hardship on them, as they know by experience how it will work.

C. A. BIRD.
Vernon Co., Mo.

TRUE WORDS, THESE.

It is almost impossible to starve on a good farm, but it is not difficult to get very seedy and hungry in almost any other profession or line of business. That is possibly the explanation of the years and ages that have passed with no general attempt on the part of farmers to give their sons professional training in the profession of farming. In other lines neglect of the rudimentary principles of the business would have resulted in failure swift and sure, but the good old farms have carried along hundreds of thousands of shiftless, unappreciative men who seem to care to know nothing of the business except to plow, sow and reap. That class of farmers is doomed. Slowly but surely the more desirable lands of this great and fertile country will pass into the hands of men who have learned at the great agricultural colleges to appreciate their value and possibilities of great profits from such lands when properly handled. This is just and necessary. Our population is increasing rapidly and the day will come when the country cannot afford to have its productive lands occupied by farmers who produce no more than one-third the material for food and clothing that such land should bring forth. The possibilities in life for professional farmer are great and the field broader than any other, says an exchange.

STATE BOARD OF AGRICULTURE.

The annual meeting of the Missouri State Board of Agriculture was held at Columbia December 17. The following officers were elected for the ensuing year: F. J. Hess, President; C. F. Adick, Vice-President; Geo. B. Ellis, Secretary; Snowdon Willis, Asst. Secretary; H. H. Banks, Treasurer. The executive committee was increased to seven members consisting of the President, Vice-President, W. C. Dean, W. C. Howell, Judge W. R. Wilkinson, W. I. Bryant, J. J. Conrad. A resolution was passed recommending the salary of the secretary be increased to \$2,000 a year, and the assistant secretary to \$1,000 a year.

The State Fair Board was then organized for the ensuing year by the election of N. H. Gentry, J. A. Potts, Norman J. Colman, J. W. Hill, Alex. Maitland, A. T. Nelson and H. F. Hand. The officers elected for this Board are N. H. Gentry, President; J. A. Potts, Vice-President; R. Rippey, Secretary, and Charles Yeater, Treasurer.

LIKES IT BETTER EVERY YEAR.

Mr. Simon Viveash, of Pecos, San Miguel Co., N. M., in renewing his subscription, writes: "I have taken the RURAL WORLD for ten years, and like it better every year. It is the best all-around agricultural paper I have seen this side of the Atlantic, and I have subscribed for a good many other agricultural papers, at different times, and none of them suit me so well as the RURAL WORLD."

MY SYMPHONY.

To live content with small means; to seek elegance rather than luxury; and refinement rather than fashion; to be worthy not respectable, and wealthy, not rich; to study hard, think quietly, talk gently, act frankly, to listen to stars and birds, to babes and sages, with open heart; to bear all cheerfully, do all bravely, await occasions, hurry never—in a word, to let the spirit of unkindness and unconquered grow up through the common. This is to be my symphony.

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NEWS AND COMMENT.

The Patrons of Husbandry will hold their 1904 National Grange in St. Louis. The World's Fair City will be the convention center for 1904.

Two more experiment stations will be established in the south to assist the two already at work in Texas for the special purpose of combating the cotton boll weevil.

Marconi announces that the first wireless message has been sent across the Atlantic from Cape Breton, Canada, to Cornwall, England. What will be the next great invention?

A useful bulletin has been issued by the Illinois Experiment Station, written by H. W. Mumford, on "Market Classes and Grades of Cattle" that will be of special moment to young cattlemen.

Missouri's 1902 corn crop of 37,500,000 bushels was produced by an average of 40 bushels to the acre. This average is larger than that of any other state in the Union. Besides having productive farms, Missouri has large and growing cities, where her farm products can be marketed.

A leading Chicago paper in an impressive editorial says that the St. Louis World's Fair will be a national surprise. Chicago concedes that the Louisiana Purchase Exposition will eclipse in grandeur and interest the Columbian celebration of 1893, just as that great show beat all previous records.

Our energetic correspondent, Mr. Thomas Lawson—"A Missourian"—is making an extended trip through Texas. We have not heard from him for several weeks but we suspect he will have something new and vigorous to say about the Lone Star State when he does get back to "Old Missouri."

A decline in cattle prices has been noticed for the last few weeks owing to the large number of shipments made from the sections where feed is scarce and high priced. This sort of thing cannot keep up much longer. Where possible to get feed at reasonable prices we advise cattlemen to hold onto all their unfinished stock.

The fluid used by the government to destroy the hyacinth pest in Florida streams has caused the death of many cattle grazing on the banks bordering on the waters. The trick in spraying is to find a specific poison for the particular pest it is intended to abate. We can't always hit it if it's a deer and miss it if it's a calf.

Turkeys are soaring higher and there are not enough to go round if we could reach them. It is a good time to brace up our minds that a turkey dinner is not essential to Christmas happiness. There are others. Little roast pig, the Missouri hen saute, possum and sweet 'taters—oh, pshaw, come to think of it we don't care much for turkey, anyway.

Over 2,300 Farmer's Institutes were the funds contributed by the different states and territories. The first held last year in the United States, work amounted to nearly \$200,000, and 7,000 persons attended these institutes. While the persons annually engaged in agricultural pursuits number about 10,000,000, the total number of persons reached by the institutes and the agricultural colleges is not much over 7 per cent of that number, while the publications of the stations reach about 500,000 farmers. The need is great for a wider dissemination among farmers of the results of agricultural study and research.

The great Southwest is being settled up rapidly and from the outlook the colonization of this wonderful region will be even more pronounced in the near future. A big colonization agency has been established with headquarters in St. Louis which will assist those interested in making a settlement in the Southwest country. The advantage of cheap lands, fertile soil, mild climate, open winters and a new country appeals strongly to the American heart and the best class of sturdy, enterprising farmers will make up the element who will turn the Southwest into the prize agricultural section of this country.

A new bulletin of special interest to Mississippi Valley Horticulturists is one just issued by the Department of Agriculture (No. 16) entitled "Practical Suggestions for Fruit Growers." It contains timely and valuable pointers on locations of orchards, varieties, pruning and planting, and tillage. A considerable portion of the 25 pages is devoted to the question of spraying and various styles and types of spraying machinery are discussed. The bulletin is written by Mr. H. P. Gould, assistant pomologist under Dr. Galloway's Bureau of Plant Industry, and is intended to be a practical presentation of principles rather than a description of methods.

One of the first needs of the National Department of Agriculture is a new building at Washington. The department is paying out over \$30,000 a year for rents and the probability is that before long a state edifice adapted to the needs of the Department will take its place among the Capitol's buildings. We suggest that such a building would acquire distinction if placed on the grounds of the Arlington experiment farm just across the Potomac. This may not be practicable and the Department would need offices near the capitol in any event. However, the idea of ample grounds, such as the 400 acres of the Arlington tract afford, surrounding the Agricultural building is very alluring.

Live Stock

TEXAS FEVER.

Dr. L. C. Tiffany, assistant state veterinarian of Illinois, is preparing to make a report of his investigations in regard to the nature of this disease and its causes. He says:

"The disease is not contagious in any interpretation of the word, but is infectious through the medium of ticks. In certain portions of the Southern States cattle are infested with ticks, which, as is the custom of all ticks, pass their entire adult life upon the animal infested, and upon arriving at maturity, fall from the infested animal, deposit their eggs upon the ground and die. In from about fifteen to a greater number of days, depending upon the condition of the weather, these eggs are hatched, producing the young ticks, which, in turn, infest cattle which may come in contact with them. From this it is apparent that cattle bearing mature ticks, (if loaded upon railway cars, shed them upon the floor of the car, and the process of incubation is there conducted, if the temperature of summer exists. The importance, then, of cleaning and disinfection of cars which have transported Southern cattle during the warm season should not be underestimated, for, if only one mature female tick should escape destruction, serious results might follow, or if the young ticks have made their appearance and are not destroyed serious results will certainly occur if native Northern animals come into their presence.

"The process of hatching of course, is the same upon pastures, in stock yards and in pens, but the public stock yards in which Southern cattle are handled have a portion of their alleys, pens and scales set apart for the exclusive use of such cattle, and so long as such plan is strictly followed no danger exists.

"Southern cattle are admitted into Illinois during the period between February 1 and November 15 under special permit from the board for immediate slaughter at plants where unloading can take place at their own chutes, and where such cattle are not driven upon any public highway. So also special permits are issued to responsible parties for the importation of Southern cattle, for feeding or grazing purposes, providing unloading can take place on their own premises and no public highway or ground used. By the terms of all these permits the holder thereof is required to thoroughly cleanse and disinfect all cars so used before removal of the same from the unloading chute, and report the fact to the secretary of this board, giving the number and initials of each car, and date of disinfection. Cattle imported for the purpose of feeding or grazing are placed in strict quarantine, and the holder of any permit is made responsible for any damage arising from failure to properly disinfect the cars and for any damage arising from the presence of such cattle in the state, and to the extent of a thorough investigation as to the method of handling Southern cattle therein, and made the report that the system of separating, yarding, weighing and handling there was such that no probability of infection to native cattle passing through those yards existed, and that infected cars must have been the origin of the trouble.

"If the federal authorities will prohibit the movement of cars, which have transported Southern cattle below the quarantine line, north of the line, for any purpose whatsoever, except the transportation of Southern cattle, and that such cars are thoroughly cleaned and disinfected, the danger of tick fever infection will be materially lessened.

"This, it would appear, can be easily prevented, and I believe the railroad companies would be grateful if such restrictions would be placed, as cost of such infection is far below the damage arising from its omission.

"Another source of danger of infection lies in what appears to be a loose system of issuance of permits to import Southern cattle into other states. Illinois, as already stated, requires that each shipper be reported to the secretary of this board, with certificate of disinfection. Some other states do not have this re-

DATE CLAIMS FOR LIVE STOCK SALES.

Claim dates for public sales will be published in this column free, when such sales are to be advertised in the RURAL WORLD. Otherwise they will be charged at regular rates.

January 9, 1903—Polled Durham cattle, Disposition of herd of late G. W. Johnson, at Lexington, Mo.

MRS. VIRGINIA P. JOHNSON, ...Jm.

March 3, 1903—Combination sale of Jacks, Jennets, stallions and mules at Smithton, Mo. L. M. Monsees & Sons.

BERKSHIRE SWINE.

Jan. 26-27th.—Combination sale of Herefords, Kansas City, Mo., C. R. Thomas, Mgr.

Feb. 2.—Biltmore Farm's annual sale of Berkshire brood sows, Blumens, N. C.

HEREFORDS.

January 26-31, 1903.—T. F. B. Botham, Herefords, Kansas City, Mo.

January 25-26.—Combination sale of Herefords at Chicago.

January 19-17, 1903.—C. W. Armour and J. A. Funkhouser, Herefords, Kansas City, Mo., at Chicago.

February 10, 11, 12, 1903.—C. A. Stannard and others, Herefords, at Oklahoma City, O. T.

February 24-26, 1903.—C. A. Stannard and others, Herefords, Kansas City, Mo.

April 13-14th.—Combination sale of Herefords, Kansas City, Mo., C. R. Thomas, Mgr.

ANGUS.

April 7-8, 1903.—W. C. McGrover, Mgr., Aberdeen Angus, Kansas City, Mo.

SHORTHORNS.

February 2, 1903.—Dr. J. B. Robertson & Wright, Vandalia, Mo.

February 10-11.—Col. G. M. Casey, Clinton, Mo., and T. J. Wernli & Son, Liberty, Mo., at Kansas City.

January 12, 1903.—L. Novinger & Son, Kirksville, Mo.

February 17.—D. K. Kellerman & Son, Mount City, Kan., at Kansas City.

February 15-16.—L. M. Forbes & Son, at Chicago, Ill.

H. J. Hughes, Secretary.

Calf Scours

Hood Farm Calf Scour Cure and Cured Digestive Powder do the work. Severe cases cured. Each Remedy, \$1; large (four times dollar) \$2.50. Sent by any railroad express point in U. S. Sec. extra. C. L. HOOD & CO., Lowell, Mass.

quirement, issuing a general permit with no official supervision. From this one may conclude that a careless shipper might not disinfect a car, and it goes back into the regular traffic, with serious results before the error is discovered, perhaps operating in Illinois, as perhaps, occurred this season.

"In investigating the recent outbreaks the number and initials of all cars which had transported cattle among which the disease had occurred was secured; also, the number and initials of all the cars that had brought Southern cattle into Illinois this season under special permit, and, upon comparison, not one car in the latter class was involved in any shipment in which the disease occurred. This proved conclusively that your system of issuing permits is eminently practical and safe, and is to be commended to other Northern states. With the regulations suggested, adopted and enforced, the danger would be minimized."

KINDNESS IN STOCK RAISING.

A quick tempered man is never a successful stockman, and no more is a self-sufficient, nervous man. No one can handle stock and get the best out of them who is not in the confidence of the animals. There is not an animal on the farm that is not worth a greater cash value if its owner can be on terms to be always given a welcome whenever he may go near it. Timid, frightened, nervous creatures are rarely profitable to keep. They are invariably poor, although they may consume more feed than it will require to keep a gentle and contented animal. Man is not the only animal that worries himself, says B. P. Wagner in "Pacific Homestead."

We read much about the value of kind treatment to the dairy cow. This is well understood, and it is one of the rules set down to be followed by the employees of every successful dairyman. The rule is just as important with the farmer with only three or four milk cows. He cannot get the best results from a cow she is capable of giving if he must drive her into the corner of the yard, tie her to a fence and pound her into submission with the milk stool before every milking. If the cow is excitable and nervous, it is certainly a poor way to gain her confidence by yelling, swearing at and pounding her. Yet this is the way many farmers break their cows. If she has been treated kindly by her owner from the day of her birth, and has learned to expect only kindness from him, she will readily acquiesce to his wishes, and the breaking process be an easy job. But from her calfhood she may have had every reason to fear her owner. He taught her the process of gulping milk instead of taking it as nature intended. She was dragged away from her mother by no gentle hand, and allowed to have for half a day to get hungry. Then a bucket of warm milk was brought to her, which nearly made her forget the "dreadful being" who brought it. But she quickly forgot the milk when the "being" taught her by the ears and jammed her head into the state, and she was held there till she choked, struggled, and struggled loose. She got no milk, however, that feed, but before her "patient and considerate" owner went away she got sundry kicks and blows. Of course she grew up a runt. Anything but a healthy, scrubby stock would seem out of place on this man's farm.

It would be next to an impossibility for him to raise horses. A colt under his care would be ruined before it was old enough for breaking. If not then, it most certainly would, should he attempt to break it. Of course he has horses, but they are of the type that he has. The new animals he buys may be in good condition, but he soon takes that out of them. An intelligent animal soon learns his driver's ways and knows what is expected of him; but this man's horses, when he happens to be out of sorts, are jerked, yanked, and beaten until the spirit is out of them and they become old pligs. Such teams cannot accomplish half the work well cared for and kindly treated horses will do.

The man whose hogs receive nothing but kicks and blows will never succeed in raising swine. The man who treats his swine raising business, the man who is not on the best of terms with his hogs will lose many litters of pigs. If not the sows themselves, that he might have saved had the animal not been afraid of him. And if she distrusts him he will bring out all the viciousness of her nature whenever he comes near to feed or care for her, and not be a object of fear and worry of some of the little fellows will be sure to get hurt. Sows with pigs too young to get out of the way should be kept as quiet as possible. This can never be if she fears or distrusts her attendant.

A sheep will never do well unless kindly treated. They are the most timid of farm animals and will suffer most if attended by one whom they fear or distrust. In fact, so important is the necessity of being on friendly terms with the flock, that any farmer who is not, and who is temper in such that he cannot get on friendly terms with them, had better sell out. He will never succeed in sheep raising. If, as all flock owners know, it is of importance to keep dogs and such worrying and scaring animals away from the flock, how much more so it is that protection should not be an object of fear and annoyance to them. The dog on the farm can be an intolerable nuisance or the most valuable assistant of the farmer, and trained with patience it depends upon the farmer himself which it shall be. A cur should not be kept on any farm, but if a young dog is taken by a farmer and trained with patience and kindness, it will become of inestimable worth. It is better by far to shoot a dog than ill-treat him.

Fattening animals should be always kept as quiet as possible, and in no way frightened or excited. The man who can pass among his animals and be followed about by them, or who is able to go up and pat one of them, will generally be a successful feeder. His kindness to his stock saves feed and adds many dollars to the income from his business as a feeder.

Kindness to animals may not be natural to some men. There is more or less of the tyrant in most men's natures, and unless it is held in check it will show itself with the creatures under his authority, and, like many bad habits, it grows and develops. But the same may be said of kindness to animals. This habit may be acquired as well, and it will pay any farmer to cultivate. Unless patience and kindness are given stock, no man has the right to be master of it.

HOMEGROWN PROTEIN.

Fat-forming foods—corn and corn fodder, ordinary hay, etc.—are easily produced or procurable. The question is ever with us where to get protein, the blood-and-muscle-making material, in the cheapest way, says "Farm and Fireside." The New Jersey Experiment Station has recently made some experiments and investigations with alfalfa, cow-peas and crimson-clover hay as a source of wheat bran to supply protein for my home-grown protein, and reports the results in Bulletin No. 161. I have for years relied largely on wheat bran to supply protein to my stock. Few people would suspect, however, that alfalfa hay, and next to it crimson-clover hay, contain a larger percentage of blood-and-muscle-making materials than wheat bran, and almost as much as dried brewers' grains. The bulletin here mentioned says: "A home-grown ration composed of thirteen pounds of alfalfa hay and thirty pounds of corn silage proved both practical and economical when fed in comparison with a ration in which over two-thirds of the protein was derived from wheat bran and dried brewers' grains. Milk was produced from the home-grown ration for two-thirds of that from the feed ration." This again proves the great value of alfalfa, especially when we consider its perennial character and the fact that it can be cut half a dozen times during the same season and will furnish more hay than any ordinary grass. When I am reminded of these facts I feel an intensified regret at my inability to grow either alfalfa or crimson-clover fodder. Both crops require naturally drained soil, and it is useless to plant them on clay loam. But even crimson-clover, although considered a Southern crop, has done well year after year on a hillside orchard of gravelly loam soil in Ontario county, where winters are usually much severer than they are in my own locality. Alfalfa, and crimson-clover, wherever they can be grown, will prove a blessing and the salvation of the farmer who wants protein for stock.

WHY CATTLE DIE.

The time of year draws near when we may look for more or less trouble with cattle dying in the stalk-fields. Their death is usually ascribed to one or more of the following causes: Indigestion from changes of feed and overeating, frosted fodder, smut, lack of water and salt, and disease germs, all or any of which may, perhaps, cause sickness or even death; but it is certain that all may and usually do fail to produce the peculiar pathological condition known as "corn-stalk disease." It seems more likely that the so-called "disease" is the result of a specific poison introduced into the system, writes E. J. Currier, in "Prairie Farmer."

In the early days of my farming in western Iowa before the days of barns or sheds or sheltering groves or stacks of clover hay, I held the stalk pasture at a high estimation. We used to hulk five rows at a time, the "hulk" being a row of the wagon, the "hired man" on the other and a boy to hulk the "down row." Thus the stalks were mostly left standing and furnished food and shelter for the comparatively few cattle that were then kept. The three persons before mentioned would scatter the stalks much as one of our first class hands does now.

It chanced one year that I put in a cross fence to enable me to pasture part of the stalks while completing the balance of the hucking. There were perhaps twenty acres of stalks, about as much as I could handle the previous year (which I failed to get planted and a large stack of water springing up in many places any very easily accessible.

The cattle were liberally fed and furnished with plenty of salt before being turned in. In fact, they were well fed all the fall previous to turning in. The morning after the second day of the yearling just dying, but as all the rest of the herd seemed to be perfectly well we turned them in again, supposing that now all danger was past. In a couple of days two more were sick, which we tried to doctor, but as it checked a cold or ear of corn, frothing at the mouth and trembling; and an autopsy showed the impacted manure in most cases though not in all. In ten days I lost ten head of forty odd head of stock, when I took turned some stock in the field, and found of the winter and lost one the second day. Cattle ran with impunity upon the stalks on the other side of the cross fence, but they did not have access to the neglected breaking. It is my theory that the poison was in the stalks, and that the stalks were the cause of the trouble. There was plenty of what my mother, who was something of a botanist, called the "deadly nightshade." Whether it is this plant which grew so plentiful there on new ground, or some other, it seems to me there is little doubt that it is some sort of plant which does the mischief. I never read of the introduction of the corn binder I never read of the disease being caused by the corn fodder, but since then we occasionally do. The binder might easily gather weeds that a man with a corn knife would reject.

There are also accounts of the disease being produced by cattle being turned in to glean after the shocks were hauled in. I realize that this is a difficult subject; but it is worth while to search for this foe that strikes us in the dark, so to speak.

I certainly do not wish to pose as the discoverer of a secret that has been known to a score of years eluded the search of eminent biologists. At best it is only a hypothesis and the credit even of this does not belong to me; but a suggestion in one of the agricultural papers, commencing, I believe, from South Dakota, recalled the memory of our talk about the nightshade. Whether it be the latter or some other substance it seems very clear to me that the so-called disease cannot be caused by impaired digestion resulting from overeating, but from some specific poison.

Mesa Co., Col.

IMPROVED LIVE STOCK BREEDERS' ASSOCIATION.

Announcement and program of the sixth annual meeting of the Improved Live Stock Breeders' Association, held under the auspices of the Missouri State Board of Agriculture, to be held at Springfield, Mo., January 6-8, 1903, Tuesday, Wednesday and Thursday—State Poultry Exhibit January 6-8—Special railroad and hotel rates.

The sixth annual meeting of the Improved Live Stock Breeders' Association held under the auspices of the Missouri State Board of Agriculture will be held in Springfield, Mo., January 6, 7 and 8, 1903. This will be the first meeting of the association held in the southern part of the state, and the farmers and breeders of that section should avail themselves of the opportunity of attending the meeting. By reference to the following program it will be seen that some

of our most successful breeders and ablest educators will address the meeting and we hope to have a large attendance from all parts of the state. Missouri farmers and breeders have the opportunity of placing this state in the very front rank in agricultural and live stock production. Will they do it? If they will get together and inaugurate a campaign of improvement and education that will permeate every corner of the State they can. Think for a moment: an increase in the average yield of the corn crop of the State of only five dollars will add nearly fifteen million dollars to the earnings of our cattle raisers. Can it be done?

The men who have consented to address the farmers and breeders of Missouri at this meeting have increased the value of the herbs of the state, not only \$5 but twenty to fifty times five dollars. The farmer should attend this meeting for the benefit he may receive from the experience of the successful breeders and for the better opinion he will have of his native state by reason of what he may learn of what others have done. The breeders should attend the meeting not only to contribute to its success but to extend his acquaintance with the farmers, which should result in mutual benefit to both.

Every one interested in poultry either as a fancier or in producing eggs and poultry for the market should attend the breeders and spend a day or week of pleasure and profit in studying a business that is adding twenty million dollars to the wealth of the state every year. Don't fail to attend the meeting. Remember it will be the best of the year of Springfield where hospitable welcome is extended to all. Reduced railroad and hotel rates.

FIRST SESSION.—Tuesday, January 6, 1903—1:30 p. m.

Address of Welcome—Hon. J. E. McLeister, Mayor of Springfield, Mo.

Response by representative of Poultry Association.

Response by representative of State Grange.

Response by representative of Swine Breeders' Association.

Response by representative of Good Roads Association.

Response by representative of Improved Livestock Association.

Response by representative of Sheep Breeders' Association.

Response by representative of State Board of Agriculture.

SECOND SESSION.—Tuesday evening, January 6—7:30 p. m.

World's Fair Session.

The Importance of Showing as Well as Being Shown, by Hon. J. O. Allison, New London, Mo., member Missouri Commission.

Missouri's Part at St. Louis World's Fair, by Hon. M. T. Davis, Aurora, Mo., president Missouri Commission.

Missouri Live Stock World's Fair, by Hon. N. H. Gentry, Sedalia, Mo., member Missouri Commission.

Agriculture and Horticulture at the Exposition, by Frederick W. Taylor, St. Louis, Mo., Chief Department of Agriculture, Louisiana Purchase Exposition.

Discussion by others present.

THIRD SESSION.—Wednesday January 7—9:30 a. m.

The Value of the Swine Breeder to the Swine Feeder, by W. L. Addy, Parnell, Mo.

Discussion led by A. F. Russell, Fillmore, Mo.

Development of Breeding Stock, by J. R. Young, Richards, Mo.

Discussion led by J. M. Turley, Stotesbury, Mo.

Road Construction and Maintenance, by D. Ward King, Maitland, Mo.

Discussion.

Best Application of Our Road Laws, by Col. G. W. Waters, Canton, Mo.

Discussion.

FOURTH SESSION.—Wednesday, January 7—7:30 p. m.

The Importance of Reliable Pedigrees and the Value of Responsible Breeders, by E. E. Axline, Oak Grove, Mo.

Discussion by Geo. W. Null, Odessa, Mo.

Treatment and Feeding of Pregnant Sows, by M. E. Anderson, Lathrop, Mo.

Discussion by J. C. Canaday, Bogard, Mo.

The Work and Value of the Swine Breeders' Association, by S. Y. Thornton, Blackwater, Mo.

Discussion, T. A. Harris, Lamine, Mo.

The General Interest of the United States Government in the Improvement of the Public Roads, by Hon. W. B. McQuinn, Commissioner of Highways, St. Louis, Mo.

Discussion.

FIFTH SESSION.—Wednesday, January 7—3:30 p. m.

Missouri to the Front, by T. F. B. Botham, Chillicothe, Mo.

What the Farmer of Missouri is Doing for the Farmer, by Dr. R. H. Jesse, President University, Columbia, Mo.

Student Life in the Agricultural College and Lessons in Agriculture from Experiment Station (illustrated by lantern views), by F. B. Mumford, Professor of Agriculture, Columbia, Mo.

Discussion.

SIXTH SESSION.—Thursday morning, January 8—9:30 a. m.

A Student's Opinion of the Missouri Agricultural College, by J. M. Doughty, Farmington, Mo.

Sheep Feeding, by Hon. Jacob Zeigler, Clinton, Ill.

Discussion.

The Profitable Classes of Cattle for the Farmer to Raise, by John Gosling, Kansas City, Mo.

The Modern Farm Cow, by W. P. Harner, Vermont, Mo.

Discussion.

SEVENTH SESSION.—Thursday, January 8—1:30 p. m.

Lessons from Improved Live Stock for the Farmers of Southern Missouri, by Phil Donnelly, Lebanon, Mo.

The Two Great Factors in Cattle Breeding (Environment and Heredity), by Benton Gabbert, Dearborn, Mo.

Discussion.

Lessons from Cattle Feeding Experiments, by F. B. Mumford, professor of agriculture, College of Agriculture, Columbia, Mo.

Discussion.

EIGHTH SESSION.—Thursday, January 8—7:30 p. m.

The program for this session will be devoted to the interest of the State Poul-

try Association. Everyone interested in poultry should attend this session. For further information address Geo. B. Ellis, secretary, Columbia, Mo.

The sixth annual meeting of the Improved Live Stock Breeders' Association of Missouri will be held at Springfield, Jan. 6-8, 1903. Every farmer who can spare the time and every stockman whether he can spare the time should attend. Write Sec. G. B. Ellis, Columbia, for particulars.

REMEDY FOR SCOURS.

Editor RURAL WORLD: How many of your readers know that I had melted and poured over the back and hips of a calf or colt, and was rubbed in a sure cure for scours? Apply as hot as can be borne. Don't think this remedy worthless until you have tried it. Then you will use no other. F. A. NICHOLS, Mokane, Mo.

CATTLE NOTES.

The well-known proprietor of Sunny slope, Home of Herefords, Mr. C. A. Stannard of Emporia, Kans., writes us to make a change in his advertisement. Mr. Stannard has one hundred large English Herefords for sale, and is registered Herefords. Both cattle and hogs are first-class in every particular and are doing exceptionally well.

No little interest is manifested in Hereford breeders' circles by the announcement that Charles W. Armour of Kansas City, Mo., and James A. Funkhouser of Plattsburg, Mo., will have a public sale of Hereford cattle at Kansas City, Mo., January 14 and 15. These gentlemen stand for all that constitutes Herefords of g e h i t h e z e a u 1 2 a c i v z m o n d v of highest excellence and breeders always appreciate the splendid merit of their herds. They will offer the cream of their stock, consisting of sixteen grand young bulls and twenty-three cows and heifers of individual excellence. The imported section of the sale have been chosen with the greatest care and offers the market for new blood and foundation stock. The imported females are in calf or have calves at side. It is safe to predict that Messrs Armour and Funkhouser will have a most satisfactory sale as regards the animals offered, the gratification of their customer's purchases and the receipts.

Mr. R. D. Ross, Carthage, Mo., will sell a draft of 30 head registered Berkshires at Kansas City, Mo., horse sale pavilion on January 22, consisting of half and half stallions and mares, about one-half blacks and the rest grays in color. Mr. Ross assures us that this affair is of excellent quality, good legs and feet and a very desirable lot from start to finish. Anyone wanting a good Percheron stallion or mare should send to Mr. R. D. Ross, Carthage, Mo., for catalogue and then attend this sale and buy a horse or mare at one-half what you would have to pay for the same animal at private sale. The too, bear in 4 on Din't eat sale. This has been the rule and no doubt will be duplicated at this sale. We want you to attend this sale and see if we are not right. Mention where you saw this ad.

The disposition sale of Palo Duro Percherons, the property of Messrs. Hanna & Co., Howard, Kans., at Kansas City, Mo., Dec. 19, was a success. The offering was of good condition and the attendance was good. Nine stallions, ranging in age from yearlings to 10 year old, brought \$150, an average of \$50.71; mares and fillies brought \$650, an average of \$313; 30 head brought \$11,720; average \$390.

ST. LOUIS NATIONAL STOCK YARDS.

Market Report Published by Evans-Snyder-Buel Company.

NATIVE CATTLE.—Receipts of cattle in the native division were light and composed mainly of butcher stuff, stockers and calves, of which very few were sold, there being not enough transactions upon which to base quotations. Shipping and export steers—Best native beef steers strictly fancy 1,300 to 1,700 lbs. \$2.50 to \$2.75; choice export steers, 1,300 to 1,600 lbs., \$2.50 to \$2.75; good shipping and export steers, 1,300 to 1,600 lbs., \$2.50 to \$2.75; fair to medium shipping steers, 1,300 to 1,600 lbs., \$2.50 to \$2.75; dressed beef and butcher steers—Steers, 1,000 to 1,200 lbs., \$2.50 to \$2.75; steers, less than 1,000 lbs., \$2.50 to \$2.75; Cows and heifers—Fancy corn-fed heifers \$2.50 to \$2.75; good choice heifers, \$2.50 to \$2.75; good fat grass heifers, \$2.50 to \$2.75; fair to good grass heifers, \$2.50 to \$2.75; best corn-fed heavy cows, \$2.50 to \$2.75; good fat medium-weight cows, \$2.50 to \$2.75; medium fat cows, \$2.50 to \$2.75; heavy-weight canners, \$2.50 to \$2.75; fair to medium feeders, 700 to 900 lbs., \$2.50 to \$2.75; good choice steers, \$2.50 to \$2.75; Bulls—Choice corn-fed bulls, \$2.50 to \$2.75; good fat bulls, \$2.50 to \$2.75; sausage bulls, \$2.50 to \$2.75; good qualified thin dehorned bulls for feeding \$2.50 to \$2.75. Veals and heretics—Choice veals, 100 to 150 lbs., \$2.50 to \$2.75; heavy fat veals, \$2.50 to \$2.75; good heretics, \$2.50 to \$2.75; thin heretics, \$2.50 to \$2.75; Stockers and feeders—Good choice feeders, 1,000 to 1,500 lbs., \$2.50 to \$2.75; medium to good feeders, 800 to 1,000 lbs., \$2.50 to \$2.75; fair to medium feeders, 700 to 800 lbs., \$2.50 to \$2.75; good qualified stockers, 600 to 700 lbs., \$2.50 to \$2.75; fair qualified stockers, 600 to 700 lbs., \$2.50 to \$2.75; common steers, \$2.50 to \$2.75; good to choice stock heifers, \$2.50 to \$2.75; medium stock heifers, \$2.50 to \$2.75; common stock heifers, \$2.50 to \$2.75; dehorned and unbranded stockers and feeders always sell a fraction better than others. Milk cows—Good quality large young cows with good calves, \$2.50 to \$2.75; medium milkers, \$2.50 to \$2.75; common milkers, \$2.50 to \$2.75; strictly fancy milkers sell above \$2.50.

SOUTHERN CATTLE.—Receipts of Southern cattle were 55 cars containing 1,644 head, against 24 cars and 851 head the week ago. Offerings consisted of 24 cars of cows, 5 of bulls, 3 of calves and 23 of steers, all of which were disposed of excepting about 5 carloads of steers. The supply was good for Saturday, and following the mean markets early in the week it was a good supply to take care of, but offerings were very heavily handed under the circumstances, with values reported practically steady on all classes of offerings. Receipts for the week were 633 cars. During the week Texas and Indiana Territory steers averaging 628 to 1,238 lbs., sold at a full range of \$2.40 to \$2.20, most of them going at \$2.10 to \$2.20. Cows and heifers brought \$1.80 to \$2.00, the bulk at \$2.00 to \$2.25; stags and oxen at \$2.00 to \$2.25; bulls \$2.40 to \$2.50, and calves at \$2.00 to \$2.25, the bulk going at \$2.00 to \$2.25.

SHEEP.—The sheep market was quiet as usual on Saturday. No good mutton sheep or lambs were on sale, the offerings being either stockers or but little

of our most successful breeders and ablest educators will address the meeting and we hope to have a large attendance from all parts of the state. Missouri farmers and breeders have the opportunity of placing this state in the very front rank in agricultural and live stock production. Will they do it? If they will get together and inaugurate a campaign of improvement and education that will permeate every corner of the State they can. Think for a moment: an increase in the average yield of the corn crop of the State of only five dollars will add nearly fifteen million dollars to the earnings of our cattle raisers. Can it be done?

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Response by representative of Sheep Breeders' Association.

Response by representative of State Board of Agriculture.

SECOND SESSION.—Tuesday evening, January 6—7:30 p. m.

World's Fair Session.

The Importance of Showing as Well as Being Shown, by Hon. J. O. Allison, New London, Mo., member Missouri Commission.

Missouri's Part at St. Louis World's Fair, by Hon. M. T. Davis, Aurora, Mo., president Missouri Commission.

Missouri Live Stock World's Fair, by Hon. N. H. Gentry, Sedalia, Mo., member Missouri Commission.

Agriculture and Horticulture at the Exposition, by Frederick W. Taylor, St. Louis, Mo., Chief Department of Agriculture, Louisiana Purchase Exposition.

Discussion by others present.

THIRD SESSION.—Wednesday January 7—9:30 a. m.

The Value of the Swine Breeder to the Swine Feeder, by W. L. Addy, Parnell, Mo.

Discussion led by A. F. Russell, Fillmore, Mo.

Development of Breeding Stock, by J. R. Young, Richards, Mo.

Discussion led by J. M. Turley, Stotesbury, Mo.

Road Construction and Maintenance, by D. Ward King, Maitland, Mo.

Discussion.

Best Application of Our Road Laws, by Col. G. W. Waters, Canton, Mo.

Discussion.

FOURTH SESSION.—Wednesday, January 7—7:30 p. m.

The Importance of Reliable Pedigrees and the Value of Responsible Breeders, by E. E. Axline, Oak Grove, Mo.

Discussion by Geo. W. Null, Odessa, Mo.

Treatment and Feeding of Pregnant Sows, by M. E. Anderson, Lathrop, Mo.

Discussion by J. C. Canaday, Bogard, Mo.

The Work and Value of the Swine Breeders' Association, by S. Y. Thornton, Blackwater, Mo.

Discussion, T. A. Harris, Lamine, Mo.

The General Interest of the United States Government in the Improvement of the Public Roads, by Hon. W. B. McQuinn, Commissioner of Highways, St. Louis, Mo.

Discussion.

FIFTH SESSION.—Wednesday, January 7—3:30 p. m.

Missouri to the Front, by T. F. B. Botham, Chillicothe, Mo.

What the Farmer of Missouri is Doing for the Farmer, by Dr. R. H. Jesse, President University, Columbia, Mo.

Student Life in the Agricultural College and Lessons in Agriculture from Experiment Station (illustrated by lantern views), by F. B. Mumford, Professor of Agriculture, Columbia, Mo.

Discussion.

SIXTH SESSION.—Thursday morning, January 8—9:30 a. m.

A Student's Opinion of the Missouri Agricultural College, by J. M. Doughty, Farmington, Mo.

Sheep Feeding, by Hon. Jacob Zeigler, Clinton, Ill.

Discussion.

The Profitable Classes of Cattle for the Farmer to Raise, by John Gosling, Kansas City, Mo.

The Modern Farm Cow, by W. P. Harner, Vermont, Mo.

Discussion.

SEVENTH SESSION.—Thursday, January 8—1:30 p. m.

Lessons from Improved Live Stock for the Farmers of Southern Missouri, by Phil Donnelly, Lebanon, Mo.

The Two Great Factors in Cattle Breeding (Environment and Heredity), by Benton Gabbert, Dearborn, Mo.

Discussion.

Lessons from Cattle Feeding Experiments, by F. B. Mumford, professor of agriculture, College of Agriculture, Columbia, Mo.

Discussion.

EIGHTH SESSION.—Thursday, January 8—7:30 p. m.

The program for this session will be devoted to the interest of the State Poul-

Administrator's Sale

...OF...

Horseman



France is the greatest horse-breeding country of the world—has 3,500,000 horses, 14 to the square mile, bred chiefly from government stallions under government supervision.

Regularity in watering horse stock during the winter season is especially in just as essential as regularity in feeding. Colts that do not have plenty of pure water will not thrive, no matter how liberally they are fed.

The sensitive, excitable colt in proper hands can be made steadygoing, tractable and reliable or he can be ruined as easily as the blowing out of a candle. It only needs a quick tempering trainer that will be harsh in language and rough in handling, and the ruin will be complete.

The drawing out of the horse market of buyers for the British army in South Africa has not brought about the predicted drop in values. Horses are selling in all the leading markets for better prices than they were bringing a year ago.

The excellence of the stock bred by Mr. A. L. Eschbach, Festus, Mo., demonstrates his ability in his special line. His guarantee stock to be all represented and asks the public to investigate his claims by inspecting before purchasing. He has thirty mammoth jacks and twenty Jennets ready for delivery.

Great activity is again the rule at Lathrop, Mo., where so many horses and mules were prepared for shipment to South Africa during the war. Over ten thousand horses and mules are located in the pens at that point, and shipments to South Africa will begin early in January. These animals are not intended for purposes of war, but will be used to restock the farms in that section.

An Oregon firm has closed a contract with Major H. P. Myton, Indian agent at Fort Duchesne, Utah, for 5,000 Indian ponies running wild on the Uintah reservation. The Portland packers expect a big boom in their beef-canning trade as the result of the improved quality of horse flesh out of which they manufacture it. The greater portion of the beef manufactured from Indian ponies will be sent to Japan for the use of the Japanese army. The Indians are to get \$2.50 each for the ponies and the round-up is now on.

Each time the horse comes into the stable the feet should be lifted and cleaned out with a hook. Where this is done there will be far fewer cases of nail pricks, for it is a very common thing for a nail to lie alongside the frog, or in the cleft, doing no harm until the horse happens to tip the nail in pawing; then it is stepped upon and the mischief is done. This practice also saves horses from becoming troubled with "thrush," for the disease is noticed at its inception and is then easily cured by application of calomel and the more careful cleansing of the stable.

Don't reject a good mare for brood purposes simply because she is a rank purser on the bit when in harness, says the "Horse Breeder." Such mares are usually full of vim and snap, owing to the unusual amount of nerve force which they possess, and this is the most important of all speed factors. Many of the most successful dams of performers and producers were naturally so "high strung" and nervy as to be comparatively useless for either track or road. Green Mountain Maid, the dam of Electioneer was one of that sort. Beautiful Belle, 2:28½, though she took a trotting record of 2:28½, was another.

Don't allow the brood mares to drink a large quantity of ice-cold water at any time, as copious draughts of such is liable to produce abortion, says the "Horse Breeder." They should be watered three times daily even if the days are short and the weather cold. The farmer who has one or two mares that are with foal will find it profitable to carry water to them in a pail in zero weather, and take the chill from the cold watering time by adding a little hot water. Colts that do not have access to warm spring water brought to the stable or paddock by aqueduct will also do much better if the chill is taken from their drinking water.

Mr. J. C. Bray of Butte, Montana, who is now in San Francisco looking for good roadsters, says that he hates to buy a horse that has his foretop cut off. "In the summer time," says Mr. Bray, "when flies are numerous, horses whose foretops have been clipped often get sore eyes because they cannot keep the flies away from their heads. If the foretop is permitted to grow, the hair will brush off the flies every time the horse shakes his head, and I have often tied a rag to the brow band of the halter when horses have been minus a foretop, as the shaking of the rag answers the purpose pretty well. It is a cruelty to deprive a horse of his means of defense against flies in the summer time, and I always make a difference in the price I offer for horses that have their foretops trimmed off."

A horse is as capable of understanding what is required of him as a man, if the same care is exercised in his case in his treatment. A horse knows when he is well treated and when he is ill-treated, and he also knows his friends and his enemies. An injury done a horse will be remembered by him for years and will be treasured up and resented when opportunity presents, although a long period may have elapsed. It is on record that horses have revenged themselves on the perpetrators of cruelty to them years after the occurrence.

Horse Owners! Use



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The safest, best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Runners or Blemishes from Horses and Cattle. SUPERBLY EFFECTIVE. GUARANTEED. Every bottle is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for use. Send for descriptive circulars.
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EUREKA Harness Oil

It makes a poor looking harness like new. Made of pure, heavy bodied oil, especially prepared to withstand the weather.

Sold everywhere in cases—all sizes. Made by STANDARD OIL CO.

On the other hand a horse will evince his satisfaction and pleasure of good treatment, and he is especially capable of appreciating praise for good work he has performed. A horse or other intelligent animal must understand what is required of him, so must a human being.

The common belief that the earning capacity of the race horse is far greater than of the trotter is not borne out by the statistics of 1902. Hudson & Gatzcomb's stable of horses won \$7,115 in the Grand Circuit between July 1st and November 1st. This is more than was won by such great stables as those of August Belmont, W. C. Whitney, James R. Keene or any others on the running turf except John A. Drake's and F. C. McLewee's. Mr. Drake heads the list of winning owners with about \$30,000 to his credit, of which \$17,500 was won on Eastern tracks after the opening of the August meeting at Saratoga. Hudson & Gatzcomb won nearly fifty races in the course of the campaign. The largest stake won by them was \$10,000, while Mr. Drake's colt Savable earned \$45,000 in a lump by winning the Futurity. A follower of the numbers is authorized for the statement that while there are more \$20,000 stakes on the running turf, the number of stakes and purses worth \$5,000 or more is larger on the trotting turf.

BLUE BULL NOTES.

By L. E. Clement.

An article in the Christmas "Horseman," a portion of which was published in the RURAL WORLD, should attract attention. Not because all of the statements and deductions are correct, but because the whole matter is taken from a new viewpoint.

I have no article at hand and shall not touch upon it to particularly criticize or refute it. The great value of the article will be in the fact that it is one that will bring forth study and investigation on the part of thousands.

The whole teaching of the article is that acquired habits are transmissible, generally only by the hand of the trainer, either forced or natural. If generally read the article will, to a large extent, do away with the prejudice that exists unreasonably against aged sires and dams. It has been my idea for years that the average life of the American farmer's horse being over twenty years of age, and that he was in the hands of a horse owner for a longer period than he was ever twenty, and my observation had been that the colts of a sire fifteen or over were stronger, and developed more easily than the colts of a younger horse. It is true that George Wilkes was sired when his sire was but seven years of age, and that he was raced until he was looked upon as the fastest son of his sire. He was not used in the stud until he was about nineteen years of age and there can be little comparison of the colts of his earlier and later life, or of those sired before and after development.

What is different in the development of Electioneer at Stony Ford and Palo Alto is not clearly set forth. It is clearly stated that at Palo Alto he showed speed, yet he was about the same age when he was taken to Palo Alto that Abdallah 15 was when he died.

If we should make comparisons of what Abdallah 15 has done with what Electioneer did at Stony Ford, the wonderful sire of colt trotters would be unknown. How much development was given Mambino Chief I do not know, but he never was driven as fast as the record of his brother, Goliath. Was it age, development, change of climate, or a better class of mares that makes the comparison of Mambino Chief's stud work in New York compare so unfavorably with his later work in Kentucky?

Abdallah 15 was taken to Kentucky one year before the war, and was killed before the close of the war. There was little or no opportunity for development at such a time. Only for Goldsmith Maid and possibly Wood's Hambletonian we should have little to show for the horse sired, when his sire was a two-year-old, and probably, all things considered, he was his greatest son. In Kentucky, mated with the best of Thoroughbred mares that were being taken north where Mambino Chief and Electioneer had been failures, and as compared with his more favored half brothers, Almont and Belmont, he shares with Mambino Chief and Electioneer the honor of proving that environment has more to do with success than either training or age.

Abdallah 15, while in Kentucky, was mated with the Burch mare and the union produced the greatest mare sired by him, Rosalind, the dam of Charles Caffrey, a mare that is breeding on in every line. In touching on the pedigree of Electioneer, a portion of his pedigree, Mr. Redfern calls his article "Where Speed Comes From." In no case does he show where speed comes from, but simply undertakes to show that it comes by training and cumulative age. Belle, by Scroggs' Davy Crockett, had produced the black horse Doble, 2:28, and bred to Mambino Chief produced Mambino Howard. What the opportunities of Mambino Howard were I do not know but out of Contention and Heel and Toe Fanny he has produced two of the great brood-mares. Allie West, sire of Contention stands head and shoulders above any stallion that ever lived that was cut off before attaining his seventh year.

In breeding for speed I would as soon have a daughter of Mabel, by a sire of any age from a two year old up, as to have anything that could be bred. Mabel herself has produced speed to four different sires. I have seen daughters of Mambino Chief that would not produce speed no matter how coupled, but a daughter of Mabel, of Rosalind, Beldina or Dolly, no matter how mated, would produce speed regardless of the age or

development of the sire. Years ago Woodburn sold two sons of Belmont, Nutwood 600 and Merchant 600, the latter out of a mare by Mambino Chief and the former out of a daughter of the pacing bred Pilot Jr. When sold Merchant dam by Mambino Chief, second dam by Grey Eagle, third dam Hannah, a prize-winning saddle mare, was valued highest.

Nutwood has gone to first place as a sire, and his dam must ever be rated as one of the greatest brood mares, yet produced. Her sons and daughters are wonderful progenitors in every line. One daughter of the Mambino Chief mare, Alice, by Almont, has become prominent. Nothing new is added but the Pilot blood in the dam of Almont.

Merchant as a young sire in St. Louis sired Monitor, a trotter and trotting sire. Taken to Southwest Missouri in ten years' stud duty he never sired a colt that was a winner, or that was esteemed good enough to start in races. In his old age taken to Lafayette Co., Mo., he sired Nettletown 2:18½, from a daughter of Almont Pilot, and from a pacing-bred granddaughter of Volunteer, he sired Cod Wave that I saw trot in 2:27 as a 3-year-old, and that was sold afterward for \$4,000, for road driving. There was no development and very little change of climate. There is no doubt that the colts owned and bred in St. Louis before he went to the southwest, was quite a trotter. I have seen Monitor trot a 2:30 gait. I am confident that at the time Lord Glenn had the horse he could have easily trotted miles at a 2:30 gait. The mares bred to Merchant at Southwest Missouri were the best we had, and the colts developed. One reason why the later foals of our prominent sires have developed more speed than those foaled at other periods is that even a partial success has attracted to them a better class of mares. I am aware that many have considered Lakeland and Belmont as active failures. The breeder of this horse and his brother Harold, believes now that of the two horses as sires that Lakeland and Abdallah was the greater. He still lives in Kansas City and can give good reasons for his faith. Harold's success as well as the other sires at Woodburn was due largely to the positive convictions of the owner, who in face of opposition from his manager, Dan Swigert, secured such dams as the Bush mare and Black Rose and placed in the stud the pacing-bred Pilot Jr. There is little doubt that the sparring indulged in between Mr. Clay and Woodburn had a great deal to do with the success of the latter.

It will also refresh him to rub his body and legs when tired. This may be done with a wipe of hay, or the bare hand. A daily grooming, removing the mud, sweat, and dust from the hair, will also improve his skin and coat, and help to keep him in good health.

4. He should also have plenty of good, pure water to drink, but care should be taken not to let him drink very much while warm.

5. The stable should be dry and light, and have plenty of fresh air, without a draught blowing directly on the horse.

6. Wagon wheels should be kept well greased, as a dry axle will greatly increase the horse's labor.

7. When drawing a load, the horse should not be hurried.

8. Be careful not to overload, as the horse is liable to strain and injure himself by too hard pulling. If the load is heavy, it is well to let him stop and rest often.

9. Whenever a stop is made on going up hill, the wheels should be blocked so as to prevent the load from pulling back on his shoulders. Sometimes a hill may be more easily ascended by taking a zigzag course, instead of going straight up.

10. A horse should never be either ridden or driven fast for a long distance, without allowing him a chance to get his wind again. One day of over-driving will wear him out more than a year of work with good care.

11. The harness and especially the inside of the collar, should be kept soft and clean; as the dust and sweat if allowed to gather on it, is likely to produce galls.

12. The harness should also be made to fit the horse, as he can do his work more easily than if it is simply allowed to hang on him.

13. Blinders and checkrein are needless, and often cruel. If used at all, the checkrein should be long enough that the horse can put his head as low as he wishes in the stable, or in driving his load. Otherwise his neck, shoulders and forelegs will become strained and lame, the muscles stiff, and the animal's usefulness decreased. If blinders are used, they should not press against the horse's eyes, nor be so loosely attached as to flap against them.

14. Saddles, either for riding or carrying loads, should always be carefully adjusted, and have plenty of blankets underneath, so as not to gail the horse's back. If he is kept in good condition and well-rounded, he is not as likely to become galled as when thin and the back bone sharp.

15. However, he should become galled, either by the saddle or collar, the sore should be washed and cared for, and the horse allowed to rest until recovered, or else be so harnessed that the sore place shall not be again rubbed and made worse.

16. If lamed by a strain (as by slipping) the muscles should be well rubbed two or three times a day, and the horse allowed to rest until recovered.



THE OLD RELIABLE REMEDY

For Spavin, Itches, Swells, Sprains, etc., and all forms of Lameness is

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Dr. R. J. Kendall Co., Gentlemen:—I enclose a copy of your "Treatise on the Horse and His Diseases." I have one of your books that is a friend of mine and I can truthfully say that your Spavin Cure is the only thing that I have ever used that has done the least particle of good. I saved a very fine race horse by using your Spavin Cure. I have used it since and I can recommend it to every one. W. G. MCKEAN.

Dr. R. J. Kendall Co., Enosburg Falls, N.Y.

to the pony. It gave that almost inquiring snuff, but soon was licking the hand and in less than five minutes had its head resting on Miss Lord's shoulder as if it were testifying in its speechless manner: "I have found a friend of the horse."

Miss Lord prepared a little leaflet on the "Care of Horses" and had it printed in Dakota for the Indians when she was teaching. The precepts for horse care which it contains are quite as good for the white man as for the red man. Miss Lord very kindly gave Mr. Chubbuck the English copy. It is as follows:

"There are many ways in which we can lighten the burden of our friend, the horse, and by so doing we shall make him a more valuable animal, stronger and better, and one in whom we can more safely trust, as in a friend. No one can expect to have and keep a good horse without giving him good care, and this is written to show some of the ways which will help to keep a horse in good condition:

1. He should have regular and good feed, and enough of it to keep him strong and in good spirits. If required to do hard work he should have grain in addition to his grass or hay. American horses doing hard work require about 12 quarts of oats a day, or its equivalent in corn. He should be fed morning, noon, and night.

2. Grain should not be fed to horses while they are heated. If tired and hot, the horse should be allowed to cool and rest before he eats his grain.

3. He should also have plenty of good, pure water to drink, but care should be taken not to let him drink very much while warm.

4. The stable should be dry and light, and have plenty of fresh air, without a draught blowing directly on the horse.

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15. However, he should become galled, either by the saddle or collar, the sore should be washed and cared for, and the horse allowed to rest until recovered, or else be so harnessed that the sore place shall not be again rubbed and made worse.

16. If lamed by a strain (as by slipping) the muscles should be well rubbed two or three times a day, and the horse allowed to rest until recovered.

17. If there is inflammation, and the injured part is hot, frequent bathing is often beneficial. Hot water is better than cold.

18. Mares with foal, or with young colts, should not be worked hard; as on the mother and her offspring will suffer from the result. In a lack of strength and usefulness thereafter.

19. Colts should not be worked until they have attained nearly their full growth and strength. Otherwise they soon become broken down and worn out, when they should be in their prime. Ordinarily horses are not at their best before they are five or six years old.

20. Horses should never be teased or annoyed in any way. It is not only cruel and unjust but is likely to make the animal vicious.

21. The horse's mouth is very sensitive unless spoiled by rough usage, and should never be jerked with the reins.

22. The whip should be used sparingly.

23. Kindness will do more than brutality.

24. The horse is an intelligent animal and easily distinguishes a kind master from a cruel one. A cruel master never makes a good horse. In a chilling rain will arouse the wrath of any true man.

25. Kindness will win his confidence. Cruelty will spoil him.

A righteous man regardeth the life of his beast; but the mercies of the wicked are cruel.—Proverbs 12:10.

If the horse could always be thus cared for the lovers of this faithful animal would not be so righteously indignant because of cruel treatment and willful neglect to which horses are many times subjected. In a chilling rain will arouse the wrath of any true man.

MRS. LEVI CHUBBUCK, Caldwell, Mo., Mo.

FAULTS OF SPEED HORSES.

The evil of cutting is somewhat incidental to the system of shoeing, although there are horses that travel so close as to strike without shoes. The injuries inflicted by cutting are of various kinds, and are located in various places. Some horses will overreach so as to cut their quarters all to pieces. This evil is very much to be dreaded and detracts very much from the value of a trotter. It necessitates the wearing of quarter boots, which are a very unsightly appendage. Other horses will bang their knees in front, while others still will pound their ankles, both in front and behind. Some horses fold the front leg, when speeding, as an exercise, and the heels of the shoe will strike the arm where it joins the body. The above named are faults which abound among speedy horses and occasion a great deal of annoyance to the owners.

The above from the "Spirit of the West," is only true where a very faulty system of shoeing exists. If the horse's feet are properly leveled and a simple, plain, light shoe put on them which fits the foot there is but little danger of any damage to the legs in natural action. All the evils above enumerated arise from improper preparation of the foot for the shoe and improper shoes used. Where horses are put to the limit of their speed, of course, it is wise to use boots for protection as horses tire and make mistakes.

Editor RURAL WORLD: At a recent meeting of the Board of Directors of the Rich Hill, Mo., Fair Association, the following officers were elected to serve the ensuing year: Homer C. Spencer, president; August Elgert, vice president; A. B. Holloway, secretary; W. F. Tygar, Jr., treasurer. Respectfully,

A. B. HOLLOWAY.

EARLY CASTRATION.

In some sections of the country breeders are practicing the castration of colts when weanlings. The reason assigned is the minimum loss incident to the operation performed at that age. It is also contended that emasculation performed at an early age improves the appearance and stimulates early maturity. The practice is objectionable, as it gives the animal too effeminate appearance. The gelding should possess considerable crest and display masculinity to sell well for a roadster. The former practice among breeders was to castrate colts when two years old, allowing them to run entire until their two-year-old form developed the necessary crest and improved the general personality of the youngsters.

Entire colts as two-year-olds display more substance, bone and substantial information than when gelded as weanlings or yearlings. Colts give no annoyance until two years old and the operation does not have to be performed until that age to prevent the colt from doing mischief. To emasculate a colt at too early an age makes it effeminate in general conformation. The head and neck are delicate, the bones of the upper extremities lack impressiveness and personality of masculinity. For the market, to develop the most popular form, castration should not be performed until the animal is two years old; then the equine form of pronounced masculinity is established.

ROD AND GUN

HUNTING IN JACKSON'S HOLE, WYOMING.

Mr. Jephthah D. Howe, general attorney for the Union and Southern Pacific railroads in St. Louis, gives the following interesting account of his recent trip, accompanied by Mr. Howe, into that famous big game resort of Wyoming known as Jackson's Hole, where President Roosevelt is contemplating making a trip for mountain lion. The same guide that will accompany the President, Mr. James S. Simpson, took Mr. Howe through the wild and at times weird country. Here is Mr. Howe's story of the trip:

"Going up to our permanent camp we had all the fish, grouse, sage chickens, buckberries and raspberries that we could eat, but saw no elk until the morning of the third day. As we were climbing a mountain that morning we scared a large bunch of grouse and were just watching them when two very large bull elk ran into their midst. The grouse flew up in the trees, while the elk ran down the mountain in front of us, stopping about 300 yards away. Just as I was getting ready to shoot they began to walk away, and I am sorry to say I shot five times without even increasing their speed. I thought certainly that I must have crippled them, but on careful investigation was unable to find any blood, which I could have easily found if it had been there, for the elk had traveled through the snow for a long distance. We then came back and killed several grouse; then proceeded to the top of the

Public Sale of 30 Registered Percherons,

about equally divided in sex and color, blacks and grays, of good quality legs and feet, at Kansas City, Mo., Horse Sale Pavilion, on Thursday, January 22, 1903.

This offering is the direct descendants of Trophonius 9026 (18085) and Houdinier 4843 (775). Dams—Lucree 7733 (11742), Actrice 7709 (11020). If you trace the bloodlines of this stock you will find it of the very best, and I am especially pleased to offer to the breeders this superior stock of individuality. For catalogue, address J. W. SPARKS, B. F. BOLAND, } Aus. R. D. ROSS, Carthage, Mo.

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mountain, which presented the prettiest view of mountain scenery that I have ever witnessed. We could look off into the Fall River basin and see very plainly from 150 to 200 miles; we could see the valley of the Grosvent and the canyons of the Crystal creek, covered with evergreens, while the mountains all around us were capped with snow. In the Fall River basin lies the vast antelope and deer country. Around on the cliffs, just beneath the snow line, are found the mountain sheep, and on the plateau as high as the elk can find feed, are found great droves of elk. It is no fairy story because they are there. I found them, saw them, took pictures of them and killed them.

"We traveled very slowly, both from necessity and choice, taking in the sublime situation, the most impressive that it has ever been my lot to see. "At noon of the third day we pitched our permanent camp in a little grove of fir trees on an elevation, by the side of which flowed one of the most beautiful springs in the mountains. Late in the afternoon Mr. Simpson and I took our guns and went to see what we could find. There was not a sign of any human being having been through the place since we had pitched our camp. We had gone probably a mile from the camp when we heard a roaring noise. 300 or 400 yards distant we saw a drove of elk of at least 500 running away. They had not seen us, but had scented us. They were too far to shoot with any accuracy and the guides advised us to wait until they were within 100 yards. We waited until they were within 100 yards and then we slipped around through the mountains until we were about one-half mile from them. We then proceeded on foot to creep up behind a cliff close enough to get a shot. We were moving along carefully under the cliff watching the elk when something scared them and they disappeared from sight. Mrs. Howe had thought we were too long away and she had proceeded to investigate and had frightened the game. In a few moments the guide said he heard them traveling close to us and on looking up about 100 feet over our heads there they were passing along. The guide instructed me to wait until one-half of them had passed and then jump right up among them. Just as I was about to take my gun, a shaggy horse, came marching by I jumped up by his side, when he ran by me, making a circle up a little above on the mountain, then started back. Just at this point, about 40 yards from me as he passed I shot him. He made a jump and rolled 150 feet down the mountain. The guide said that I had killed him, but I was not sure of it, so I proceeded to try for another one, but, after shooting two times at them running, the guide discovered the one I had shot and we went down to him. This being my first elk, he appeared the largest-looking animal I had ever seen. I had taken pictures of buffalo and bear through the park, but they were not to be compared with this fellow laying there kicking. I had shot him through the heart with a soft-nose bullet. I am having his head mounted and I am going to put it in my office when it comes. I

want to keep close to me the association of that scene. The balance of the drove ran off a couple of hundred yards and then proceeded to walk leisurely away. "While slipping around to get on the elk I jumped two mountain sheep in about thirty steps from me, but did not shoot them, however, if there was a

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